

Programming challenge 10: Debianization of PredictProtein

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Installing debian-unstable in L1

Required packages: *debootstrap*, *dpkg-dev* - easy
Bind your home and proc, see *Network filesystems*

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Bind your home and proc, see *Network filesystems*

Now perform as root:

```
$ chroot /srv/unstable/  
$ adduser --home /home/<user> --uid <uid> <user>  
$ su - <user>
```

Installing debian-unstable in L1

To know for sure, that you are in wheezy/sid

In new environment:

```
$ cat /etc/debian_version  
wheezy/sid instead of 6.0.4
```

My special case

- I had a perl module for uploading
- The module was not contained in CPAN
- Naming conventions: `Foo::Bar` is going to be `libfoo-bar-perl` in debian
- I am going to use git, not svn

Creating your working dir

I am working directly in /home/jens/

Performing an ls yields something like:

```
$ ls -al
drwxr--r-- libnhgri-blastall-perl-0.66/
-rwxr--r-- libnhgri-blastall-perl_0.66.orig.tar.gz
```

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-rwxr--r-- libnhgri-blastall-perl_0.66.orig.tar.gz
```

And in libnhgri-blastall-perl:

```
$ cd libnhgri-blastall-perl
$ ls -al
drwxr--r-- debian/
```

Initial build

In libnhgri-blastall-perl:

```
$ dpkg-buildpackage -us -uc -S
```

Options used:

- -us does not sign the source package
- -uc does not sign the .changes file
- -S only builds source, no binary files

Signing is not needed, because FTP-Masters will do..

Initialize the local git repository

In libnhgri-blastall-perl:

```
$ git init  
$ git-import-dsc --pristine-tar  
../libnhgri-blastall-perl_0.66-1.dsc
```

Set up the git repo at alioth

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Log in to git.debian.org:

```
$ ssh -v -l jenzo-guest git.debian.org
$ cd /git/pkg-perl/
$ ./setup_repository libnhgri-blastall-perl
description
```

Performing an initial push to alioth

One could have first debug all lintian warnings before pushing the first time!

Nevertheless...

On your local (L1) add Alioth repository as a remote:

```
$ git remote add origin  
ssh://jenzo-guest@git.debian.org/git/pkg-perl/  
packages/libnhgri-blastall-perl.git  
$ git push --all --set-upstream  
$ git push --tags
```

Fix lintian warnings

This work highly depends on your package!

But: Most warnings are stored in the web - simply visit

<http://lintian.debian.org/tags-all.html> and search for your warning.

An example from lintian.debian.org

Lintian Reports

[Maintainers](#)[Emitted Tags](#)[All Tags](#)[Packages](#)

W syntax-error-in-dep5-copyright

All reports of syntax-error-in-dep5-copyright for the archive. The extended description of this tag is:

The machine-readable copyright file didn't pass Debian control file syntax check.

Refer to <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/> for details.

Severity: normal, Certainty: possible

Check: source-copyright, Type: source

The package names link to the relevant maintainer page and the corresponding report for the source package. The links go to the full maintainer report page, which includes info and experimental tags and overridden tags, rather than the default page that shows only errors and warnings.

Check gives you good hints where the error is located!

Another example from lintian.debian.org

Lintian Reports

[Maintainers](#)[Emitted Tags](#)[All Tags](#)[Packages](#)

W manpage-has-errors-from-pod2man

All reports of manpage-has-errors-from-pod2man for the archive. The extended description of this tag is:

This man page contains a section "POD ERRORS" generated by pod2man. This sections lists errors in the POD syntax found by pod2man during the generation of the man page.

Severity: normal, Certainty: certain

Check: manpages, Type: binary

The package names link to the relevant maintainer page and the corresponding report for the source package. The links go to the full maintainer report page, which includes info and experimental tags and overridden tags, rather than the default page that shows only errors and warnings.

Now we have to make changes to the binaries... tricky!

Fixing the manpages with quilt

Manpages are included somewhere in blib/man/

Fixing the manpage error:

```
$ cd blib/man3/  
$ man -l NHGRI:Blastall
```

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```

And watch the end of the manpage with the POD-ERROR section.
Mine says:

POD-ERROR section in manpage

```
Forgot =back before =head1 around line 957  
=item outside of =over around line 974
```

Adding a patch with quilt

Configure quilt according to the wiki!

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Then perform in libnhgri-blastall-perl:

```
$ quilt new patch-name  
$ quilt edit blastall.pm and fix errors  
$ quilt refresh  
$ quilt applied  
$ git add debian/patches  
$ git commit  
$ git push
```

Source of information



Git walkthrough for debian-perl

<http://pkg-perl.alioth.debian.org/git.html>



Debian policy

<http://www.debian.org/doc/debian-policy>



Lintian Homepage lintian.debian.org



Quilt How-To

<http://pkg-perl.alioth.debian.org/howto/quilt.html>